# Petr Jiricek

## List of Publications by Year in descending order



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|---|---|---|---|
| 104 papers | 3,030 citations | 361413 20 h-index | 175258 52 g-index |
| 105 all docs | 105 docs citations | 105 times ranked | 4279 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Graphene oxide and reduced graphene oxide studied by the XRD, TEM and electron spectroscopy methods. Journal of Electron Spectroscopy and Related Phenomena, 2014, 195, 145-154. | 1.7 | 1,297 |
| 2 | C sp2/sp3 hybridisations in carbon nanomaterials â€“ XPS and (X)AES study. Applied Surface Science, 2018, 452, 223-231. | 6.1 | 316 |
| 3 | Surface Study of Fe3O4 Nanoparticles Functionalized With Biocompatible Adsorbed Molecules. Frontiers in Chemistry, 2019, 7, 642. | 3.6 | 144 |
| 4 | Measurement of the transmission function of the hemispherical energy analyser of ADES 400 electron spectrometer. European Physical Journal D, 1994, 44, 261-267. | 0.4 | 78 |
| 5 | Dependence of experimentally determined inelastic mean free paths of electrons on the measurement geometry. Surface Science, 1998, 412-413, 42-54. | 1.9 | 55 |
| 6 | Scattering angle dependence of the surface excitation probability in reflection electron energy loss spectra. Physical Review B, 2003, 67, . | 3.2 | 43 |
| 7 | Effect of the Pd/MWCNTs anode catalysts preparation methods on their morphology and activity in a direct formic acid fuel cell. Applied Surface Science, 2016, 387, 929-937. | 6.1 | 39 |
| 8 | Surface and in-depth distribution of sp2 and sp3 coordinated carbon atoms in diamond-like carbon films modified by argon ion beam bombardment during growth. Carbon, 2018, 134, 71-79. | 10.3 | 39 |
| 9 | On line shape analysis in X-ray photoelectron spectroscopy. Surface Science, 2001, 470, 325-336. | 1.9 | 35 |
| 10 | Electron irradiated potassium-silicate glass surfaces investigated by XPS. Journal of Non-Crystalline Solids, 2005, 351, 1665-1674. | 3.1 | 33 |
| 11 | Photoemission from Al(100) and (111): Experiment andab initiotheory. Physical Review B, 2008, 78, . | 3.2 | 32 |
| 12 | Surface excitations in electron backscattering from silicon surfaces. Surface Science, 2004, 562, 92-100. | 1.9 | 31 |
| 13 | Chaotropic anion based â€œwater-in-saltâ€•electrolyte realizes a high voltage Znâ€“graphite dual-ion battery. Journal of Materials Chemistry A, 2022, 10, 2064-2074. | 10.3 | 28 |
| 14 | Determination of the inelastic mean free paths of electrons in copper and copper oxides by elastic peak electron spectroscopy (EPES). Surface and Interface Analysis, 1998, 26, 400-411. | 1.8 | 27 |
| 15 | Escape probability of photoelectrons from silver sulphide. Surface Science, 2001, 473, 8-16. | 1.9 | 27 |
| 16 | Surface excitation effects in elastic peak electron spectroscopy. Surface Science, 2003, 531, L335-L339. | 1.9 | 24 |
| 17 | Studies of oxidized carbon nanotubes in temperature range RTâ€“630Â°C by the infrared and electron spectroscopies. Journal of Alloys and Compounds, 2010, 505, 379-384. | 5.5 | 23 |
| 18 | Non-destructive assessment of the polarity of GaN nanowire ensembles using low-energy electron diffraction and x-ray photoelectron diffraction. Applied Physics Letters, 2015, 106, . | 3.3 | 23 |

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|---|---|---|---|
| 19 | Temperature modification of oxidized multiwall carbon nanotubes studied by electron spectroscopy methods. Physica Status Solidi (B): Basic Research, 2009, 246, 2645-2649. | 1.5 | 22 |
| 20 | Time dependent thermal treatment of oxidized MWCNTs studied by the electron and mass spectroscopy methods. Applied Surface Science, 2012, 258, 7912-7917. | 6.1 | 22 |
| 21 | Study of Ni-Catalyzed Graphitization Process of Diamond by in Situ X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 6629-6636. | 3.1 | 22 |
| 22 | Electron band bending of polar, semipolar and non-polar GaN surfaces. Journal of Applied Physics, 2016, 119, . | 2.5 | 21 |
| 23 | Elastic electron backscattering from overlayer/substrate systems. Surface and Interface Analysis, 2001, 31, 825-834. | 1.8 | 19 |
| 24 | Electron Supersurface Scattering On Polycrystalline Au. Physical Review Letters, 2013, 110, 086110. | 7.8 | 19 |
| 25 | Nanostructure fabrication on the top of laser-made micropillars for enhancement of water repellence of aluminium alloy. Materials Letters, 2019, 256, 126601. | 2.6 | 19 |
| 26 | Amorphous carbon nanocomposite films doped by titanium: Surface and sub-surface composition and bonding. Diamond and Related Materials, 2018, 81, 61-69. | 3.9 | 16 |
| 27 | Elastic electron backscattering from silicon surfaces: effect of surface roughness. Surface and Interface Analysis, 2002, 34, 215-219. | 1.8 | 15 |
| 28 | Angular-resolved elastic peak electron spectroscopy: experiment and Monte Carlo calculations. Surface and Interface Analysis, 2006, 38, 615-619. | 1.8 | 15 |
| 29 | Pd/MWCNTs catalytic activity in the formic acid electrooxidation dependent on catalyst surface treatment. Physica Status Solidi (B): Basic Research, 2011, 248, 2516-2519. | 1.5 | 15 |
| 30 | Quantitative low-energy electron diffraction analysis of the GaN<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="true">(</mml:mo><mml:mn>000</mml:mn><mml:mover) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 297 Td (accent="true"><mm 60 | 1.8 | 15 |
| 31 | Lead-silicate glass surface sputtered by an argon cluster ion beam investigated by XPS. Journal of Non-Crystalline Solids, 2017, 469, 1-6. | 3.1 | 15 |
| 32 | Altered layer composition of sputtered InP(100) wafers: non-destructive concentration depth profiling. Surface Science, 1994, 318, 421-427. | 1.9 | 14 |
| 33 | Valence-band photoemission fromGaAs(100)â”c(4Ã—4). Physical Review B, 2001, 63, . | 3.2 | 14 |
| 34 | Growth mode of ultrathin gold films deposited on nickel. Applied Surface Science, 2002, 199, 138-146. | 6.1 | 14 |
| 35 | Dielectric response functions of the (0001Â¯), (101Â¯3) GaN single crystalline and disordered surfaces studied by reflection electron energy loss spectroscopy. Journal of Applied Physics, 2011, 110, 043507. | 2.5 | 14 |
| 36 | Diamond-like carbon and nanocrystalline diamond film surfaces sputtered by argon cluster ion beams. Diamond and Related Materials, 2016, 68, 37-41. | 3.9 | 14 |

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|---|---|---|---|
| 37 | Pd-catalysts for DFAFC prepared by magnetron sputtering. Applied Surface Science, 2017, 419, 838-846. | 6.1 | 14 |
| 38 | Electron affinity of undoped and boron-doped polycrystalline diamond films. Diamond and Related Materials, 2018, 87, 208-214. | 3.9 | 14 |
| 39 | One-step photoemission calculations for ideal GaAs(001) and AlAs(001) surfaces and(GaAs)m(AlAs)nsuperlattices. Physical Review B, 2001, 63, . | 3.2 | 13 |
| 40 | LEED structural analysis of GaAs(001)-c(4Ã—4) surface. Surface Science, 2004, 566-568, 89-93. | 1.9 | 13 |
| 41 | XPS and XAES of polyethylenes aided by line shape analysis: The effect of electron irradiation. Polymer Degradation and Stability, 2009, 94, 1714-1721. | 5.8 | 13 |
| 42 | Chemical and structural properties of Pd nanoparticle-decorated grapheneâ€"Electron spectroscopic methods and QUASES. Applied Surface Science, 2017, 404, 300-309. | 6.1 | 13 |
| 43 | Determination of the electron inelastic mean free path in polyacetylene by elastic peak electron spectroscopy using different spectrometers. Applied Surface Science, 1999, 144-145, 168-172. | 6.1 | 12 |
| 44 | Stability of the inelastic mean free paths determined by elastic peak electron spectroscopy in nickel and silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 447-455. | 2.1 | 12 |
| 45 | XPS and He II photoelectron yield study of the activation process in Tiâ€"Zr NEG films. Vacuum, 2003, 71, 329-333. | 3.5 | 12 |
| 46 | Mn incorporation into the GaAs lattice investigated by hard x-ray photoelectron spectroscopy and diffraction. Physical Review B, 2011, 83, . | 3.2 | 12 |
| 47 | Attenuated total reflectance Fourier-transform infrared spectroscopic investigation of silicon heterojunction solar cells. Review of Scientific Instruments, 2015, 86, 073108. | 1.3 | 12 |
| 48 | Spin Seebeck effect in É-Fe2O3 thin films with high coercive field. Journal of Applied Physics, 2018, 124, . | 2.5 | 12 |
| 49 | Influence of Pdâ€Au/MWCNTs surface treatment on catalytic activity in the formic acid electrooxidation. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 3195-3199. | 0.8 | 11 |
| 50 | GaN polarity determination by photoelectron diffraction. Applied Physics Letters, 2013, 103, . | 3.3 | 11 |
| 51 | Optical characterization of low temperature amorphous MoOx, WOX, and VOx prepared by pulsed laser deposition. Thin Solid Films, 2020, 693, 137690. | 1.8 | 11 |
| 52 | Transfer of samples between separated ultrahigh vacuum instruments for semiconductor surface studies. Review of Scientific Instruments, 1998, 69, 2804-2805. | 1.3 | 10 |
| 53 | Studies of iron and iron oxide layers by electron spectroscopes. Applied Surface Science, 2005, 252, 330-338. | 6.1 | 10 |
| 54 | Passivation of semipolar (10-1-1) GaN with different organic adsorbates. Materials Letters, 2019, 236, 201-204. | 2.6 | 10 |

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|---|---|---|---|
| 55 | Influence of structural properties on (de-)intercalation of ClO4â^' anion in graphite from concentrated aqueous electrolyte. Carbon, 2022, 186, 612-623. | 10.3 | 10 |
| 56 | Inelastic mean free path measurements of electrons near nickel surfaces. Surface and Interface Analysis, 2000, 30, 217-221. | 1.8 | 9 |
| 57 | Photoemission from Î± and Î² phases of the GaAs(001)-c(4Ã—4) surface. Surface Science, 2009, 603, 3088-3093. | 1.9 | 9 |
| 58 | The line shape analysis of electron spectroscopy spectra by the artificial intelligence methods for identification of C sp<sup>2</sup>/sp<sup>3</sup> bonds. Physica Status Solidi (B): Basic Research, 2010, 247, 2838-2842. | 1.5 | 8 |
| 59 | Polarity of GaN with polar {0001} and semipolar , , orientations by x-ray photoelectron diffraction. Journal of Materials Research, 2015, 30, 2881-2892. | 2.6 | 8 |
| 60 | Chemical depth profile of layered a-CSiO:H nanocomposites. Applied Surface Science, 2018, 456, 941-950. | 6.1 | 8 |
| 61 | Effect of treatment at high temperatures on morphology of a carbon supported Pd catalyst investigated by X-ray diffraction and photoelectron spectroscopy aided with QUASES. Applied Surface Science, 2018, 458, 855-863. | 6.1 | 8 |
| 62 | Hard Xâ€ray photoelectron spectroscopy study of core level shifts at buried GaP/Si(001) interfaces. Surface and Interface Analysis, 2020, 52, 933-938. | 1.8 | 8 |
| 63 | Non-destructive depth profile reconstruction of single-layer graphene using angle-resolved X-ray photoelectron spectroscopy. Applied Surface Science, 2019, 491, 16-23. | 6.1 | 7 |
| 64 | The backscattering factor for the Au N67VV Auger transition. Applied Surface Science, 2005, 252, 905-915. | 6.1 | 6 |
| 65 | Determination of the inelastic mean free paths (IMFPs) in Ti by elastic peak electron spectroscopy (EPES): Effect of impurities and surface excitations. Applied Surface Science, 2006, 252, 2741-2746. | 6.1 | 6 |
| 66 | Attenuation of photoelectrons and Auger electrons leaving nickel deposited on a gold surface. Surface and Interface Analysis, 2007, 39, 916-921. | 1.8 | 6 |
| 67 | Studies of EPES REELS spectra of polyethylenes aided by line shape analysisâ€"Effect of electron irradiation. Journal of Electron Spectroscopy and Related Phenomena, 2011, 184, 360-365. | 1.7 | 6 |
| 68 | In-out asymmetry of surface excitations in reflection-electron-energy-loss spectra of polycrystalline Al. Physical Review B, 2014, 89, . | 3.2 | 6 |
| 69 | Polarity of semipolar wurtzite crystals: X-ray photoelectron diffraction from GaN{101Â¯1} and GaN{202Â¯1} surfaces. Journal of Applied Physics, 2014, 116, . | 2.5 | 6 |
| 70 | Electron band bending and surface sensitivity: X-ray photoelectron spectroscopy of polar GaN surfaces. Surface Science, 2017, 664, 241-245. | 1.9 | 6 |
| 71 | ArF excimer laser induced changes in the Si(100)/SiO2 interface studied in situ by ESCA and LEED. Applied Surface Science, 1989, 43, 297-300. | 6.1 | 5 |
| 72 | Measurements of the escape probability of photoelectrons and the inelastic mean free path in silver sulphide. Surface and Interface Analysis, 2000, 30, 222-227. | 1.8 | 5 |

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|---|---|---|---|
| 73 | GaAs (100)-(1X1) Structure Analysis from LEED Intensities. European Physical Journal D, 2003, 53, 49-54. | 0.4 | 5 |
| 74 | UV degradability of polysilanes for nanoresists examined by electron spectroscopies and photoluminescence. European Physical Journal D, 2006, 56, 41-50. | 0.4 | 5 |
| 75 | Investigation of CoPd alloys by XPS and EPES using the pattern recognition method. Journal of Alloys and Compounds, 2007, 428, 190-196. | 5.5 | 5 |
| 76 | Electric and magnetic dipole emission of Eu3+: Effect of proximity to a thin aluminum film. Journal of Luminescence, 2022, 246, 118778. | 3.1 | 5 |
| 77 | Influence of surface composition and density on electron inelastic mean free paths in Ge. Surface and Interface Analysis, 2002, 33, 381-393. | 1.8 | 4 |
| 78 | Elastic electron backscattering from Ti: grain size effect. Surface and Interface Analysis, 2004, 36, 816-819. | 1.8 | 4 |
| 79 | Effect of electron irradiation on Naâ€“K silicate glass investigated using X-ray photoelectron spectroscopy and pattern recognition method. Journal of Non-Crystalline Solids, 2008, 354, 3840-3848. | 3.1 | 4 |
| 80 | Reflection electron energy loss spectroscopy of aluminum. Surface Science, 2010, 604, 1006-1009. | 1.9 | 4 |
| 81 | Atomic and electronic structure of N-terminated GaN(0001Ì„) (1 Ã— 1) surface. Journal of Physics: Conference Series, 2012, 398, 012013. | 0.4 | 4 |
| 82 | Potassium-silicate glass exposed to low energy H+ beam. Nuclear Instruments & Methods in Physics Research B, 2012, 280, 111-116. | 1.4 | 4 |
| 83 | GaN quantum dot polarity determination by X-ray photoelectron diffraction. Applied Surface Science, 2016, 389, 1156-1160. | 6.1 | 4 |
| 84 | Influence of the preparation conditions of <scp>Pdâ€ZrO</scp><sub>2</sub> and <scp>AuPdâ€ZrO</scp><sub>2</sub> nanoparticleâ€“decorated functionalised <scp>MWCNT</scp>s: Electron spectroscopy study aided with the <scp>QUASES</scp>. Surface and Interface Analysis, 2017, 49, 1124-1134. | 1.8 | 4 |
| 85 | Photoelectron escape from iron oxide. Surface Science, 2004, 572, 93-102. | 1.9 | 3 |
| 86 | Determination of the electron inelastic mean free path for samarium. Surface Science, 2005, 595, 1-5. | 1.9 | 3 |
| 87 | Valence band photoemission from in-situ grown GaAs(100)-c(4 Ã— 4). European Physical Journal D, 2006, 56, 21-26. | 0.4 | 3 |
| 88 | Determination of electron inelastic mean free paths for poly[methyl(phenyl)silylene] films. Polymer, 2009, 50, 2445-2450. | 3.8 | 3 |
| 89 | Distinguishing elastic and inelastic scattering effects in reflection electron energy loss spectroscopy. Physical Review B, 2010, 82, . | 3.2 | 3 |
| 90 | Hydrogen on nanocrystalline diamond film surfaces. Diamond and Related Materials, 2012, 26, 66-70. | 3.9 | 3 |

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|---|---|---|---|
| 91 | Electronic and crystalline structure of Si/SiO2 interface modified by ArF excimer laser. Progress in Surface Science, 1990, 35, 197-199. | 8.3 | 2 |
| 92 | Electron mean free path for GaAs(100)-c(4Ã—4) at very low energies. Surface Science, 2004, 566-568, 1196-1199. | 1.9 | 2 |
| 93 | Studies of AuNi alloys by electron spectroscopies with the aid of the line shape analysis by the pattern recognition method. Surface and Interface Analysis, 2006, 38, 1204-1210. | 1.8 | 2 |
| 94 | Role of final states in photoemission from Al(111). Surface Science, 2007, 601, 4105-4108. | 1.9 | 2 |
| 95 | Irradiation of potassiumâ€silicate glass surfaces: XPS and REELS study. Surface and Interface Analysis, 2016, 48, 543-546. | 1.8 | 2 |
| 96 | A theoretical investigation of photoemission spectra from (GaAs)2(AlAs)2 superlattices. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 1127-1132. | 1.7 | 1 |
| 97 | Elastic electron backscattering from silicon surfaces: effect of charge-carrier concentration. Surface and Interface Analysis, 2004, 36, 809-811. | 1.8 | 1 |
| 98 | Elastic electron backscattering from surfaces in selected angular ranges. Applied Surface Science, 2004, 229, 67-80. | 6.1 | 1 |
| 99 | Measurement of the differential electron surface and volume excitation probability in Cu, CuO and Cu2O. Surface and Interface Analysis, 2006, 38, 628-631. | 1.8 | 1 |
| 100 | Electron surface states in short-period superlattices: (GaAs)2/(AlAs)2(100)-c(4Ã—4). Surface Science, 2006, 600, 3646-3649. | 1.9 | 1 |
| 101 | Photoemission from Al(100): experiment and one-step theory. Journal of Physics: Conference Series, 2008, 100, 072035. | 0.4 | 1 |
| 102 | Layer-resolved photoelectron diffraction: Electron attenuation anisotropy in GaAs. Journal of Electron Spectroscopy and Related Phenomena, 2012, 185, 184-187. | 1.7 | 1 |
| 103 | Long-term changes in Al thin-film extreme ultraviolet filters. Applied Optics, 2021, 60, 8766. | 1.8 | 1 |
| 104 | Comment on: â€œAs 3d core level studies of (GaMn)As annealed under As cappingâ€•by I. Ulfat, J. Adell, J. Sadowski, L. Ilver, J. Kanski, Surface Sci. 604 (2010), 125.. Surface Science, 2010, 604, 2064. | 1.9 | 0 |